

TRAFFIC IMPACT ANALYSIS
QUEEN OF ANGELS CHURCH EXPANSION
Alpine, California
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TRAFFIC IMPACT ANALYSIS QUEEN OF ANGELS - CHURCH ALPINE, CALIFORNIA

INTRODUCTION

The following traffic study has been prepared to determine and evaluate the traffic impacts on the local circulation system due to the expansion of the Queen of Angels Catholic Church. The existing Church is located on the east side of W. Victoria Drive, just south of Old Stagecoach Run in the community of Alpine. **Figure 1** shows the general vicinity of the project. **Figure 2** shows a more detailed project area map.

The proposed expansion includes converting the existing 3,200 square foot (SF) chapel into a “Day Only” chapel and constructing a new 16,120 SF church, a 7,300 SF administration building, a new 22,000 SF hall, and the addition of 228 parking stalls. The new church will be situated behind the existing chapel, increasing the number of parishioners from 350 to 740. Access to the church will be provided via one existing ingress only driveway to the south and two new project constructed driveways via West Victoria Drive and one emergency only driveway will be provided via Hale Drive. It is proposed that the church’s main driveway (middle driveway) will align with Old Stagecoach Run and be utilized as the main access point to the parking lots.

The additional traffic generated by the project has been added to the existing on-street traffic volumes and the traffic impacts were analyzed at several key intersections, the main project driveway at Old Stagecoach Run, and street segments in the project area. An analysis of the Weekday PM peak hour and Sunday AM peak hour conditions was conducted.

Included in this traffic analysis is:

- Project Description;
- Existing street system description;
- Existing traffic volumes;
- Project traffic generation;
- Project traffic distribution/assignment;
- Cumulative projects discussion;
- Significance Criteria;
- Traffic Analysis methodology;
- Intersection and street segment capacity analyses;
- Project Driveway Assessment;
- Congestion Management Program Compliance;
- Corner Sight Distance Assessment; and
- Significance of Impacts / Mitigation Measures.

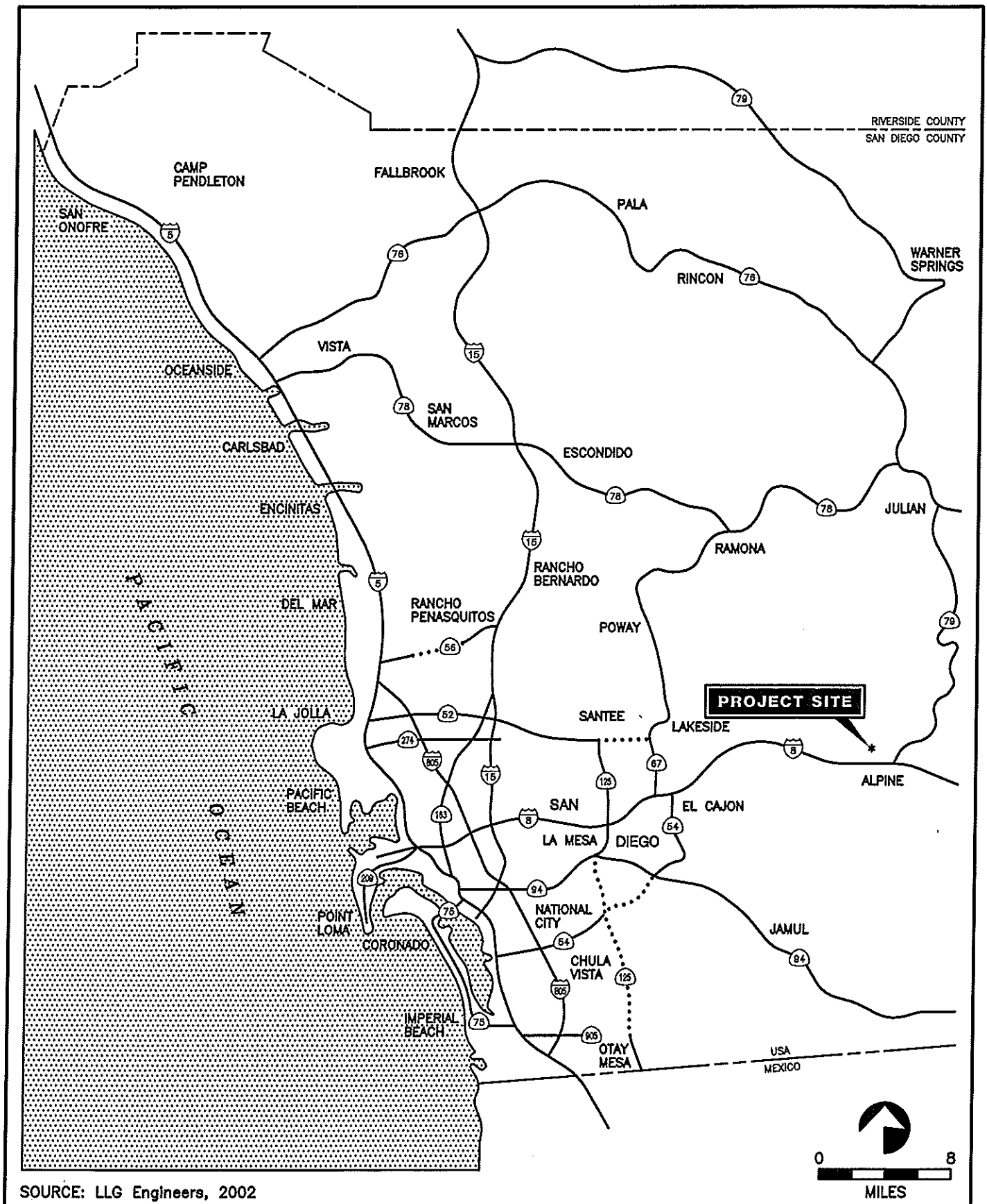
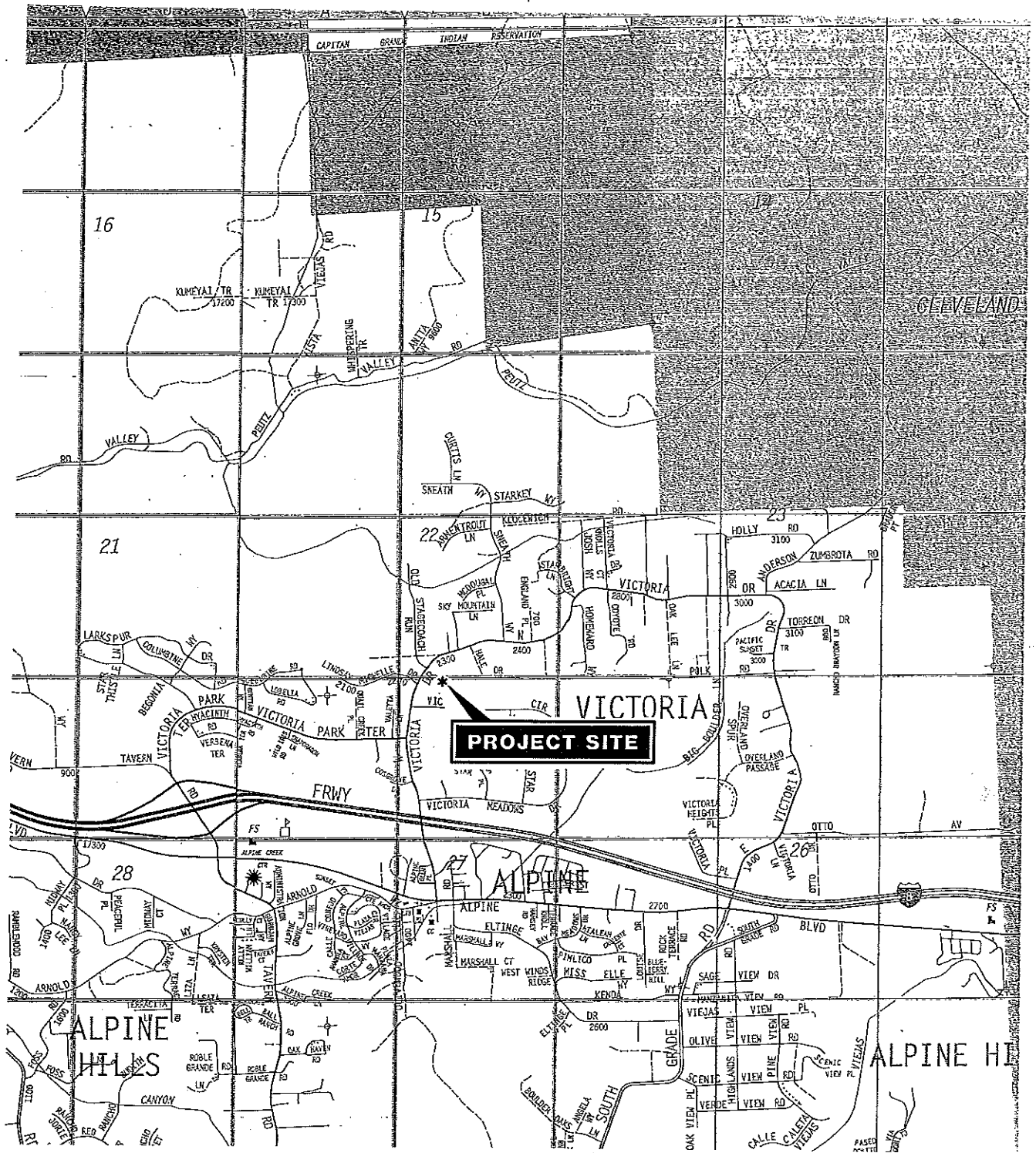


Figure 1
VICINITY MAP



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FIG1133.DWG

NO SCALE

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Figure 2

PROJECT AREA MAP

PROJECT DESCRIPTION

The project proposes to construct a new 16,120 SF church building, a 7,300 SF Administration building, a 22,000 SF Hall, 228 new parking stalls (per county ordinance), and convert the existing chapel into a “Day Only” chapel. It is anticipated that the new church will be utilized for church services, meetings, choir practices, and adult religious education, along with other uses. **Appendix A** contains a copy of the anticipated activities and allowed uses under the Major Use Permit (MUP). In addition, special events and Town Hall meetings occur approximately 15 times per year, usually from 7-9 PM. The structures are briefly described below:

The existing chapel will be converted to a “Day Only” chapel once the new church is constructed. The Day Only chapel will be in use Monday through Friday from 7:00 AM to 8:15 AM for daily mass. In addition, the church will be in use from 3:15 PM to 7:15 PM on Wednesdays for choir practices and for religious education classes.

The 7,300 SF Administration building is expected to operate Monday thru Friday from 8:00 AM to 5:00 PM with approximately 20 staff members. The office will be in use to support religious education classes, meetings, junior high youth gatherings, and provide support services for all the masses. Appendix A provides greater detail as to the specific activities that the new Administration building will provide.

The 22,000 SF Hall will be in use periodically for meetings and other activities, Monday through Friday from 8:00 AM to 5:00 PM with approximately 20 staff members. The Hall will be in use for religious education, meetings, and junior high youth gatherings. Appendix A provides greater detail as to the specific activities that the new Hall will provide.

Along with the new structures, a total of 228 new parking stalls will be constructed, which is 43 more stalls than required by the County Zoning Ordinance. Appendix A contains a copy of the parking requirements.

The site is located about thirty miles east of downtown San Diego within the community of Alpine. Access to the site will be provided via one existing ingress only driveway, two new driveways connecting to West Victoria Drive and an additional project constructed driveway (gated - emergency only) connecting to Hale Drive. **Figure 3** shows the project site plan.

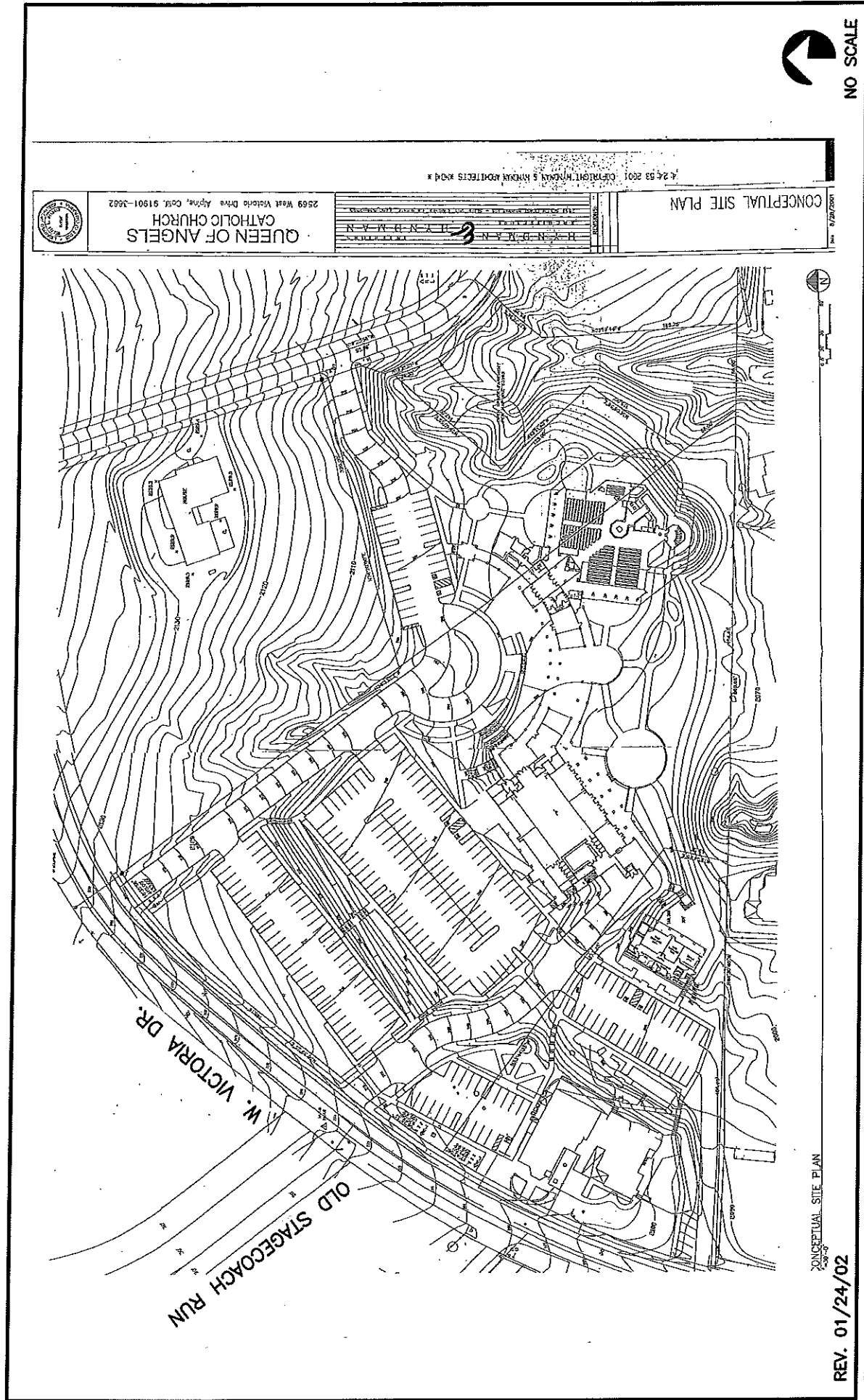


Figure 3

SITE PLAN

QUEEN OF ANGELS CHURCH EXPANSION

EXISTING STREET SYSTEM

According to the County of San Diego Public Road Standards, Prime Arterials should be 102 feet wide in 122 feet of Right-of-Way (R/W), providing six thru lanes, a raised median and curbside parking. Major Roads should be 78 feet wide in 98 feet of R/W, providing four thru lanes, a raised median and curbside parking. Collectors should be 64 feet wide in 84 feet of R/W providing four thru lanes with curbside parking or four thru lanes with a left-turn lane. Light Collectors should be 40 feet wide in 60 feet of R/W, providing two thru lanes with a left-turn lane. Rural Light Collectors should be 40 feet wide in 60 feet of right-of-way, providing two thru lanes. Bike lanes add 10 feet to both the road width and the R/W. The following provides a brief synopsis of the circulation system near the project.

The following is a description of the roadways in the project area. **Figure 4** depicts the existing conditions including the lane geometrics of the key intersections in the study area.

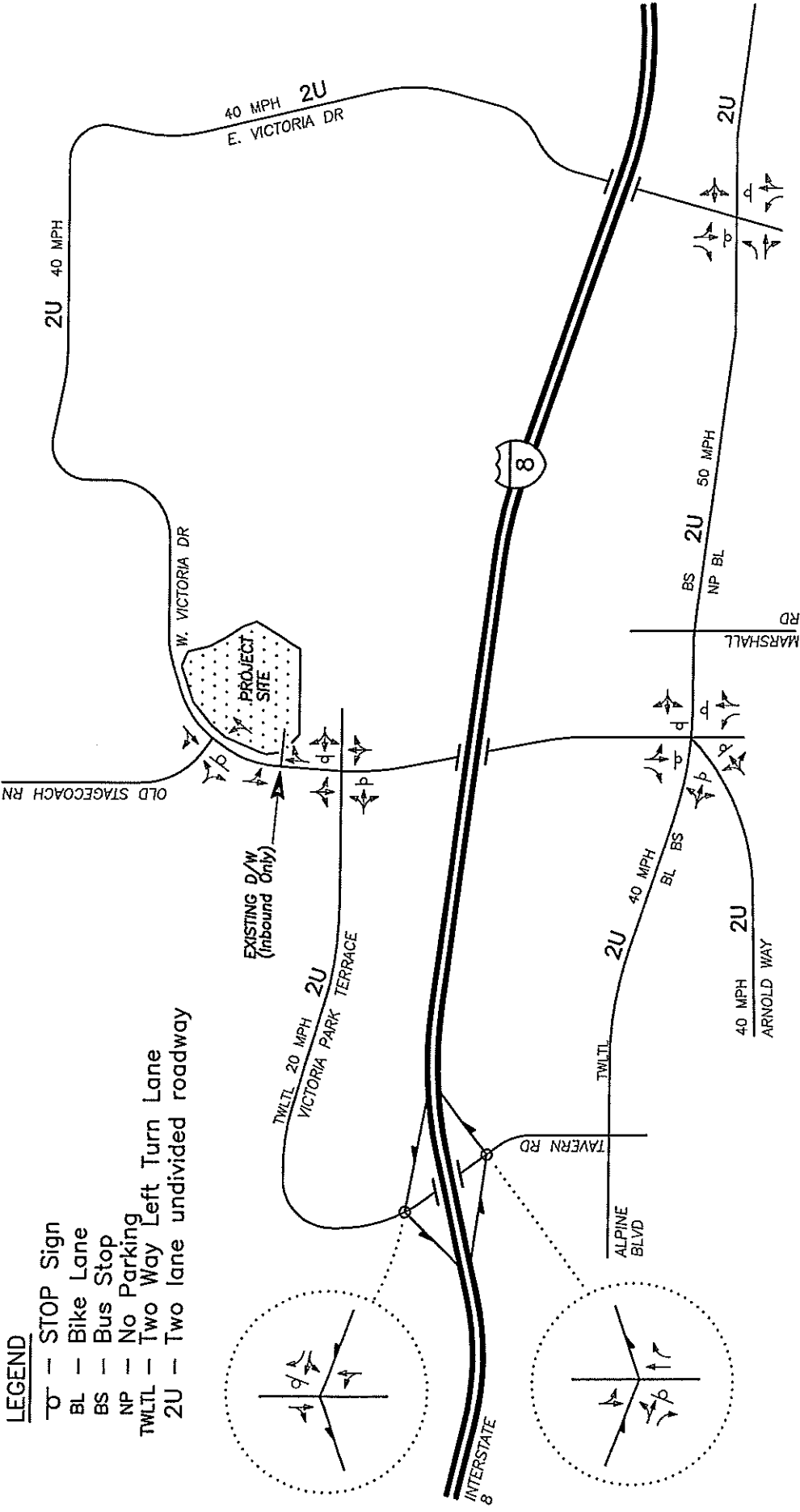
Interstate 8 is an east/west facility that extends as a freeway from the San Diego area eastward to the California-Arizona border and beyond. It generally provides two lanes in each direction within the project area. A local interchange is provided at Tavern Road and Willows Road (West).

Alpine Boulevard is classified as a Collector on the County Circulation Element. It currently provides one lane in each direction with a two-way turn lane from just east of the fire department driveway to Tavern Road. Alpine Boulevard's width varies from approximately 80 feet near Tavern Road to about 40 feet wide closer to East Victoria Drive. The speed limit ranges from 35 to 50 mph. Bike lanes are provided in both directions and parking is generally prohibited east of East Victoria Drive.

The County of San Diego (County) Department of Public Works (DPW) proposes to revise the San Diego County General Plan Circulation Element. Alpine Boulevard between Tavern Road and the East Victoria Drive/South Grade Road intersection is currently classified as a Collector Road on the Circulation Element, and is proposed to be re-classified to a Light Collector Road. This would reduce the LOS E capacity of Alpine Boulevard from 34,200 ADT to 16,200 ADT.

Victoria Park Terrace is classified a Collector Street on the County of San Diego Circulation Element. It is currently constructed as a two-lane undivided roadway with a Two Way Left Turn Lane (TWLTL) west of Wild Iris Road. No striped bike lanes or posted bus tops are provided. Parking is allowed on both sides and Victoria Park Terrace has a posted speed of 50 mph.

West Victoria Drive is classified as a Light Collector on the County of San Diego Circulation Element. It is currently constructed as a narrow two-lane undivided roadway, which loops eastward and transitions into East Victoria Drive. West Victoria Drive is a winding road with a posted speed limit is 40 mph. No bike lanes are provided, but there are bus stops located intermittently the roadway.

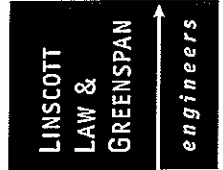


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Figure 4

EXISTING CONDITIONS DIAGRAM

QUEEN OF ANGELS CHURCH EXPANSION



East Victoria Drive is classified as a Light Collector on the County of San Diego Circulation Element. It is currently constructed as a narrow two-lane undivided roadway, which loops back west to downtown Alpine (West Victoria Drive). East Victoria Drive is a winding road with a posted speed limit is 40 mph. No bike lanes are provided, but there are bus stops located intermittently the roadway.

EXISTING TRAFFIC VOLUMES

The most recent Average Daily Traffic volumes (ADT) for key segments were obtained from the County of San Diego Traffic count records, a previous traffic study (Alpine Albertsons), and the SANDAG Traffic Forecast Information Center (TFIC) website. **Table 1** summarizes the existing ADTs. Sunday AM and PM Weekday peak hour intersection turning movement volume counts were conducted by Linscott, Law & Greenspan Engineers (LLG) at the following key intersections, on Sunday, November 18th, 2001 between 11:00 AM-1:00 PM and on Tuesday, December 4th, 2001 from 4:00-6:00 PM. These time periods were chosen to coincide with peak Sunday service times and peak weekday times although the church has very limited weekday activities. The intersection counts at the Tavern Road interchange were conducted in 1999 and were obtained from a previous study (Alpine Albertsons). LLG applied a 5% growth factor to the Tavern Road intersection counts to estimate Year 2001 volumes. Sunday AM peak hour counts at the Tavern Road interchange were assumed to be reduced to 25% of the Weekday AM peak hour to account for reduced existing Sunday AM peak hour. **Figure 5** shows the existing ADT segment volumes on key segments and AM/PM peak hour turning movement volumes at the key intersections listed below.

- West Victoria Drive/Old Stagecoach Run;
- West Victoria Drive/Victoria Park Terrace;
- West Victoria Drive/Alpine Boulevard;
- East Victoria Drive/Alpine Boulevard;
- Tavern Road/I-8 westbound ramps; and
- Tavern Road/I-8 eastbound ramps.

Appendix B contains copies of the intersection manual and 24-hour machine count sheets.

TABLE 1
EXISTING DAILY TRAFFIC VOLUMES

STREET SEGMENT	YEAR	24-HOUR VOLUME (ADT)
TAVERN ROAD		
I-8 Eastbound Ramps to Alpine Boulevard	2004	21,600**
ALPINE BOULEVARD		
Tavern Road to W. Victoria Drive	2002	8,750*
W. Victoria Drive to Marshall Road	2001	10,360
Marshall Road to E. Victoria Drive	2002	7,990*
South Grade Road to Willows Road (West)	2002	4,590*
VICTORIA PARK TERRACE		
Tavern Road to W. Victoria Drive	2002	1,900E
W. VICTORIA DRIVE		
East of Oldstagecoach Road	2002	2,270
Old Stagecoach Road to Victoria Park Terrace	2002	2,400
Victoria Park Terrace to Alpine Boulevard	2001	1,850E

Notes:

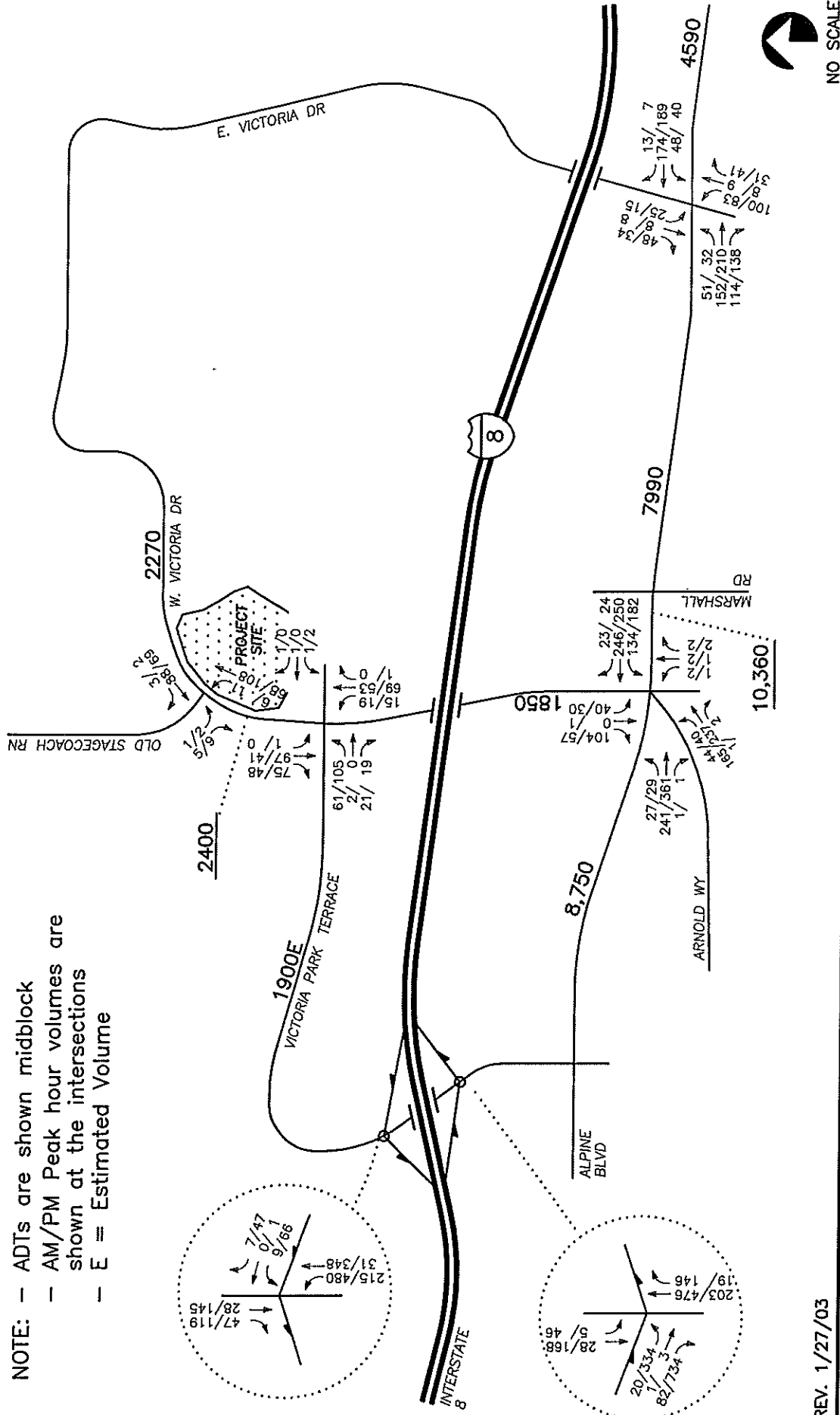
ADTs rounded to the nearest 10.

* - Older volumes were increased by 2% per year to reflect current conditions.

** - Volume obtained from SANDAG website and was increased by 2% per year to reflect current conditions.

E - estimated ADT assuming PM peak hour comprises 10% of ADT.

- NOTE:
- ADTs are shown midblock
 - AM/PM Peak hour volumes are shown at the intersections
 - E = Estimated Volume



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FIG1133.DWG

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Figure 5

EXISTING TRAFFIC VOLUMES
SUNDAY AM/WEEKDAY PM PEAK HOURS & ADTs

QUEEN OF ANGELS CHURCH EXPANSION

PROJECT TRAFFIC GENERATION

Table 2 shows the traffic generation calculations for the proposed project for both weekdays and Sundays. For the weekday scenario, LLG utilized San Diego Association of Governments (SANDAG) generation rates for churches (9.0/1,000 SF). The weekday generators are the Hall, Day Chapel, and an administrative building for a total of 32,500 square feet (SF). The existing site weekday traffic generating land uses total about 1,500 SF. Therefore, the net increase in weekday square footage is 31,000 SF and the net project is calculated to generate about 280 ADT.

For the Sunday AM peak hour scenario, LLG utilized the Institute of Transportation Engineers (ITE) Trip Generation Manual, 5th Edition generation rates for churches (36.63/1,000 SF). Since SANDAG rates are considered to be low for churches on a Sunday. The proposed church is 16,120 SF and the existing church is 3,200 SF. Therefore, the net increase in church SF is 12,920. To be conservative, a 16,120 church was used for generation purposes and the church is calculated to generate 590 ADT on a Sunday.

PROJECT TRAFFIC DISTRIBUTION/ASSIGNMENT

Figure 6 shows the estimated project traffic distribution percentages. The distribution of project traffic was determined based on discussions with church directors regarding the future orientation of parishioners.

The assignment of project traffic to the three driveways connecting to West Victoria Drive was based on the assumption that the middle driveway will be the main driveway with full access, the southern driveway will be inbound only, and the northern driveway being full access. The driveway connecting to Hale Drive is a gated emergency entrance and therefore no project traffic was added. Traffic from the south via Tavern Road was assumed to use one of three roadways to reach the church, Arnold Way, Alpine Boulevard or Victoria Park Terrace.

Figures 7 and 7a (Project Driveways) show the assignment of project traffic. **Figure 8** shows the existing + project traffic volumes.

TABLE 2
PROJECT WEEKDAY TRAFFIC GENERATION SUMMARY

LAND USE	SIZE	DAILY TRIP ENDS (ADT)		PM PEAK HOUR		
		RATE	VOLUME	% of ADT	IN:OUT SPLIT	VOLUME IN OUT
Proposed Weekday Church Uses	32,500 SF	9.0	293	8%	50:50	12 12
Existing Weekday Church Uses	1,500 SF	9.0	13	-	-	1 1
Net Project	29,300 SF	9.0	280	8%	50:50	11 11

SOURCE: SANDAG Trip Generation Brief Guide (April, 2002).

Notes:

SF = Square Footage.

Trip-ends are one-way movements, entering or leaving.

PROJECT SUNDAY TRAFFIC GENERATION SUMMARY

LAND USE	SIZE	DAILY TRIP ENDS (ADT)		AM PEAK HOUR		
		RATE	VOLUME	% of ADT	IN:OUT SPLIT	VOLUME IN OUT
Church	16,120 SF	36.63	590	26%	30:70	46 109

SOURCE: Institute of Transportation Engineers (ITE) Trip Generation Manual, 7th Ed.

Notes:

SF = Square Footage.

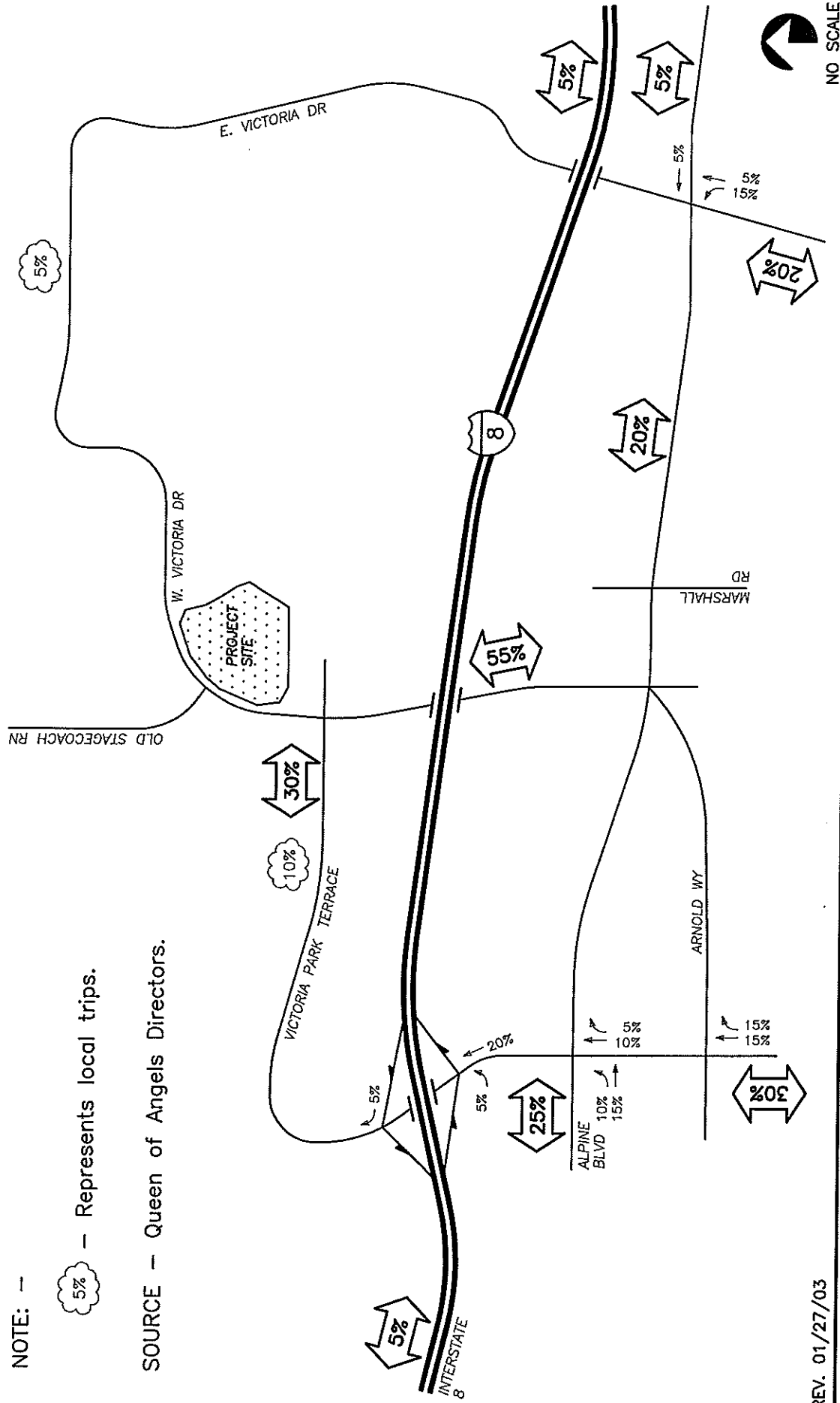
Trip-ends are one-way movements, entering or leaving.

1. The existing 3,200 SF church was not removed from the overall trip generation in order to be conservative.

NOTE: —

5% — Represents local trips.

SOURCE — Queen of Angels Directors.



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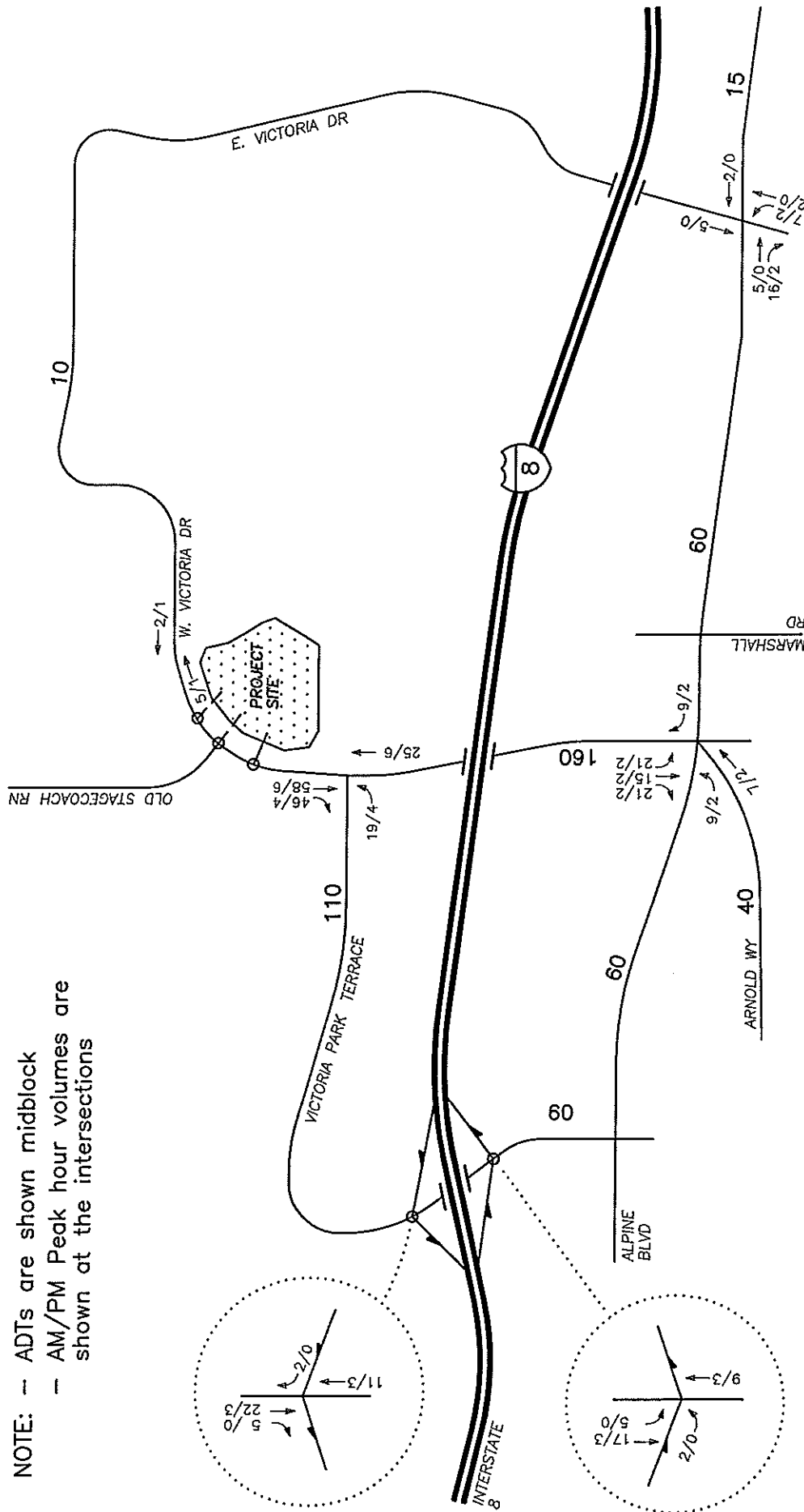
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Figure 6

REGIONAL DISTRIBUTION PERCENTAGE

QUEEN OF ANGELS CHURCH EXPANSION

NOTE: - ADTs are shown midblock
 - AM/PM Peak hour volumes are shown at the intersections



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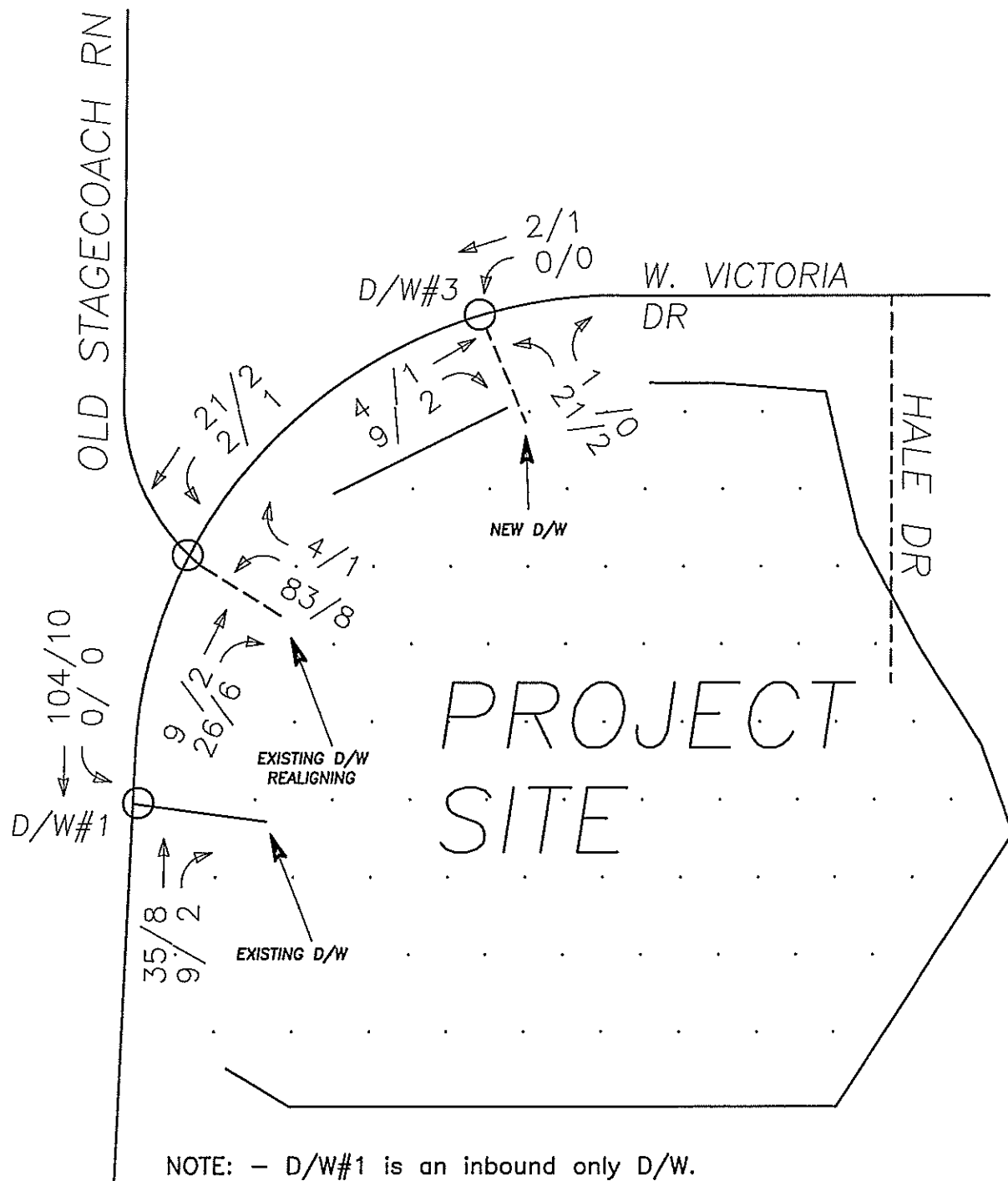
FIG1133.DWG

Figure 7

PROJECT TRAFFIC VOLUMES
 SUNDAY AM/WEEKDAY PM PEAK HOURS & ADTs

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FIG1133.DWG



NO SCALE

Figure 7a

PROJECT DRIVEWAY TRAFFIC VOLUMES
 SUNDAY AM/WEEKDAY PM PEAK HOURS & ADTs
 15 QUEEN OF ANGELS CHURCH EXPANSION

NOTE: - ADTs are shown midblock
 - AM/PM Peak hour volumes are shown at the intersections

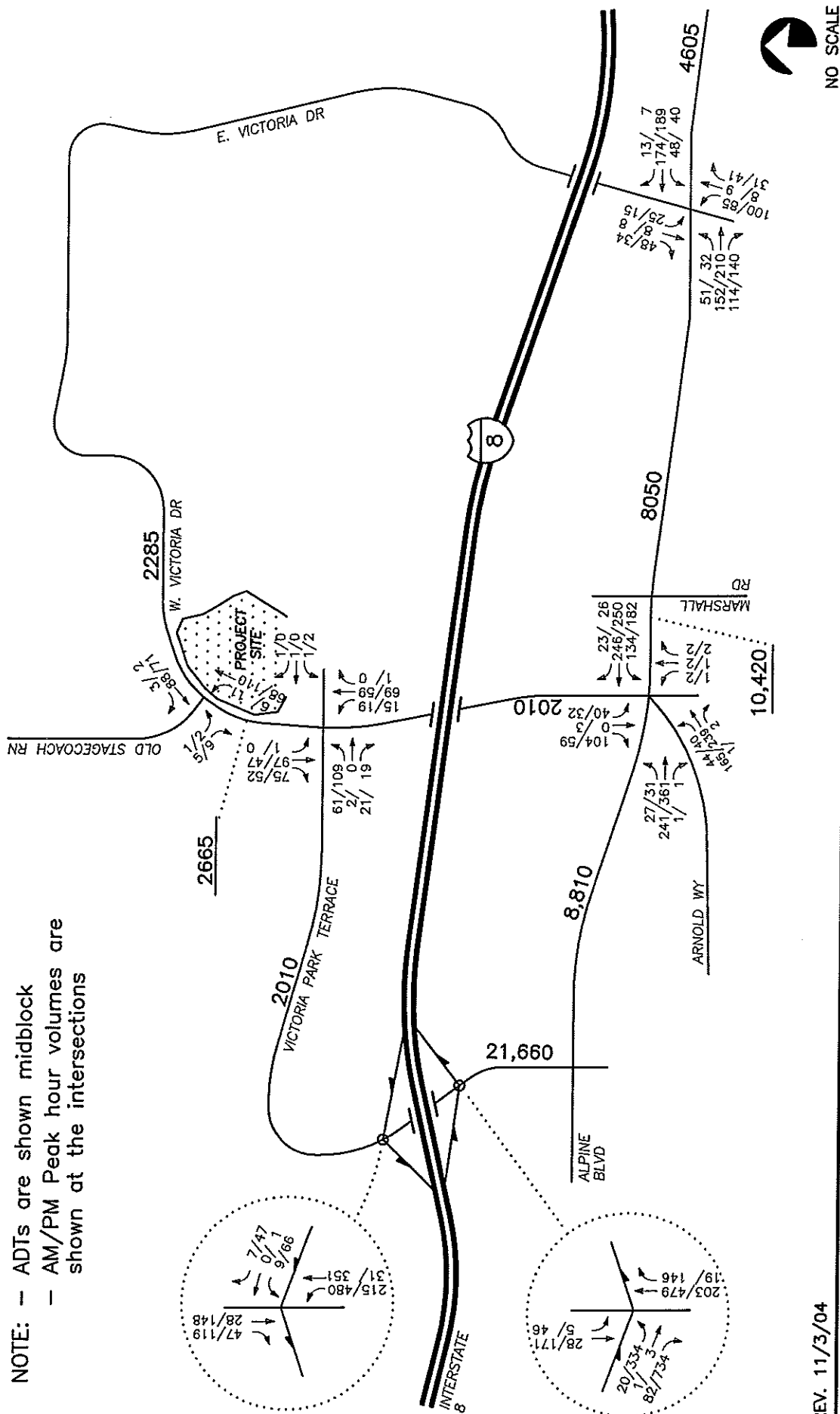
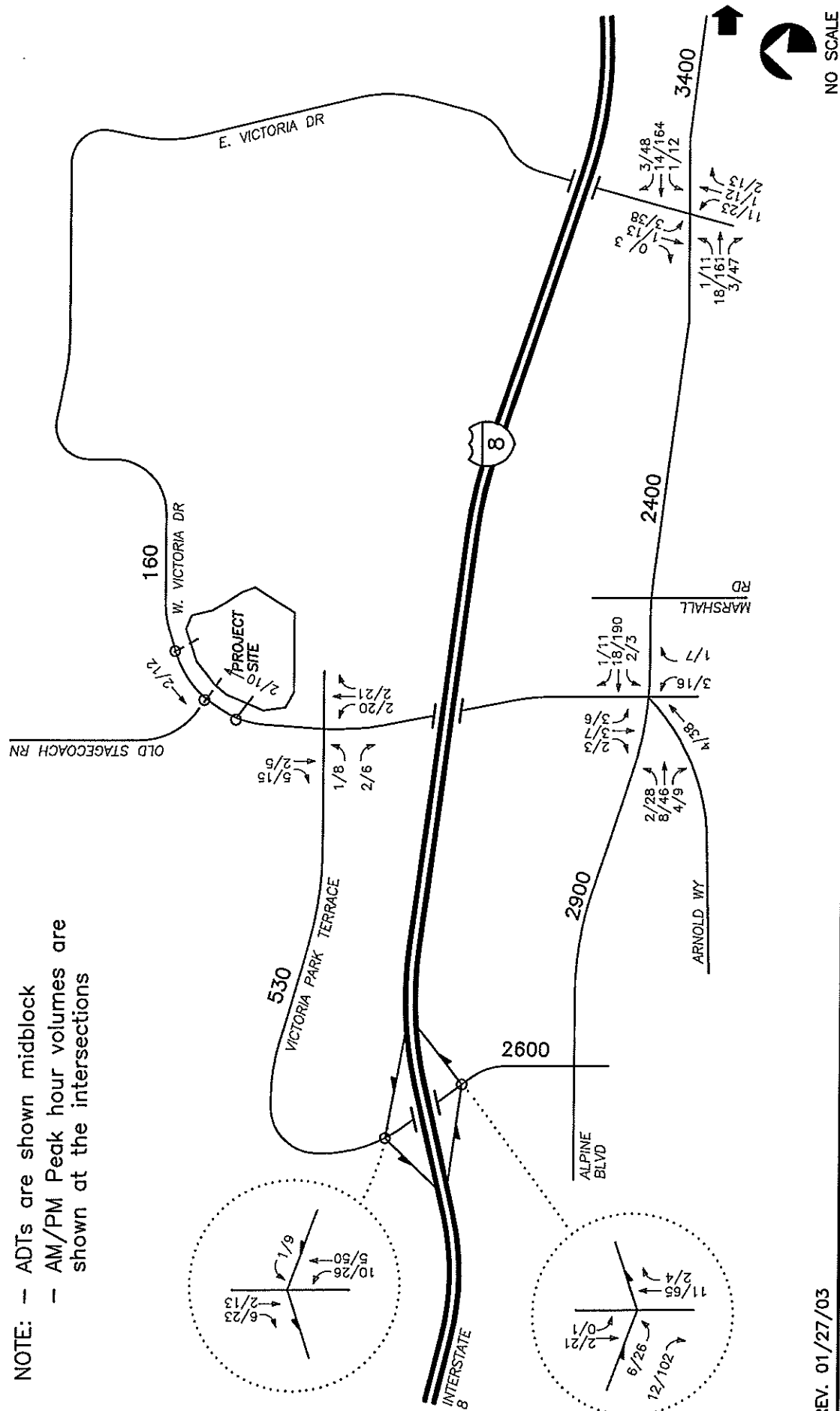


Figure 8
 EXISTING + PROJECT TRAFFIC VOLUMES
 SUNDAY AM/WEEKDAY PM PEAK HOURS & ADTs
 QUEEN OF ANGELS CHURCH EXPANSION

CUMULATIVE PROJECTS

As of the date of this submittal, traffic from thirty-nine (39) other cumulative projects in the Alpine area has been compiled. Research was conducted at the County of San Diego to determine the overall list of cumulative projects. In addition, cumulative project information was obtained from traffic consultants for other projects in the area. **Figure 9** shows the total cumulative project traffic volumes. **Figure 10** shows the existing + project + cumulative projects traffic volumes. **Appendix C** contains the individual assignments for each cumulative project.

NOTE: - ADTs are shown midblock
 - AM/PM Peak hour volumes are shown at the intersections



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FIG1133.DWG

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Figure 9
 CUMULATIVE PROJECTS TRAFFIC VOLUMES
 SUNDAY AM/WEEKDAY PM PEAK HOURS & ADTs

QUEEN OF ANGELS CHURCH EXPANSION

NOTE: - ADTs are shown midblock
- AM/PM Peak hour volumes are shown at the intersections

FIG1133.DWG

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EXISTING + PROJECT + CUMULATIVE PROJECTS TRAFFIC VOLUMES SUNDAY AM/WEEKDAY PM PEAK HOURS & ADTs

QUEEN OF ANGELS CHURCH EXPANSION

SIGNIFICANCE CRITERIA

The Public Facility Element of the County General Plan, together with relevant portions of CEQA Guidelines (**Appendix D**), as well as the County of San Diego Significance Thresholds, were used as criteria for determining significant impacts. The Public Facilities Element provides the fundamental County standards for acceptable traffic Levels of Service (LOS), as follows:

A significant cumulative impact would occur if the project, in combination with reasonably foreseeable past, present, and future projects, would either: (a) reduce the level of service to below LOS 'D' on off-site and on-site abutting intersections or segments of Circulation Element roads, or (b) significantly impact congestion on such roads that are currently operating at a level of service of LOS 'E' or 'F'.

The table below was used to determine if impacts were significant.

Measures of Significant Project Impacts to Congestion Allowable Increases on Congested Roads and Intersections			
Road Segments			
	2-Lane Road	4-Lane Road	6-Lane Road
LOS E	200 ADT	400 ADT	600 ADT
LOS F	100 ADT	200 ADT	300 ADT
Intersections			
LOS E	Delay of 2 seconds	20 peak-hour trips on a critical movement	
LOS F	Delay of 1 second, or 5 peak-hour trips on a critical movement.	5 peak-hour trips on a critical movement	

TRAFFIC ANALYSIS METHODOLOGY

The traffic analysis assesses the key intersections and street segments in the project area. All intersections are unsignalized. The following is an explanation of the unsignalized intersection and street segment analysis methodologies.

For unsignalized intersections, level of service is determined by the computed or measured control delay and is defined for each minor street movement. Level of service is not defined for the intersection as a whole. Level of Service F exists when there are insufficient gaps of suitable size to allow side street traffic to safely cross through or onto a major street traffic stream. This level of service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches. The method, however, is based on a constant critical gap size; that is, the critical gap remains constant no matter how long the side-street motorist waits. LOS F may also appear in the form of side-street vehicles selecting smaller-than-usual gaps. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior, which are more difficult to observe in the field than queuing.

In most cases, at Two-Way STOP controlled (TWSC) intersections, the critical movement is the minor street left-turn movement and the delay and Levels of Service are based on Chapter 10 of the 2000 Highway Capacity Manual (HCM). As such, the minor street left-turn movement can generally be considered the primary factor affecting overall intersection performance. The lower threshold for LOS F is set at 50 seconds of delay per vehicle. There are many instances, particularly in urban areas, in which the delay equations will predict delays of 50 seconds (LOS F) or more for minor street movements under very low volume conditions on the minor street (less than 25 vehicles per hour or vph). **Appendix E** contains a full description of unsignalized intersection LOS and the HCM calculation sheets.

The key street segments in the project area were analyzed on a daily basis by comparing the daily traffic volumes (ADTs) to the County of San Diego's standard street classification table. This table is shown in **Appendix F** and provides estimates of segment capacities based on traffic volumes and roadway characteristics.

The following is a description of the existing, existing + project, and existing + project + cumulative projects street system operations.

EXISTING OPERATIONS

Table 3 shows a summary of the existing operations at the key unsignalized intersections in the project area. This table shows that the minor-street left-turn movements at each of the key intersections are calculated to currently operate at LOS D or better during both the AM and PM peak hours with the following exceptions which are calculated to operate at LOS F during the weekday PM peak hour.

- Tavern Road/I-8 Westbound Ramps; and
- Tavern Road/I-8 Eastbound Ramps.

Table 4 shows that under existing conditions, all street segments are currently operating at LOS D or better on a daily basis.

EXISTING + PROJECT OPERATIONS

Table 3 shows that with the addition of project traffic, the minor-street left-turn movements at each of the key unsignalized intersections are calculated to continue to operate at LOS D or better during both the AM and PM peak hours with the exception of the following intersections, which are calculated to continue to operate at LOS F during the weekday PM peak hour.

- Tavern Road/I-8 Westbound Ramps;
- Tavern Road/I-8 Eastbound Ramps.

Table 4 shows that with the addition of project traffic, all three street segments are calculated to continue to operate at LOS D or better. No significant impacts are calculated on the street segments.

EXISTING + PROJECT + CUMULATIVE PROJECTS OPERATIONS

Table 3 shows that with the addition of cumulative traffic, the majority of the key intersections are calculated to operate at LOS E or F during the weekday PM peak hour.

Table 4 shows that with the addition of cumulative project traffic, all street segments are calculated to operate at LOS D or better with the exception of the following segments along Alpine Boulevard which are calculated to operate at LOS E or F on a daily basis.

- Alpine Boulevard: Tavern Road to W. Victoria Drive (LOS F)
- Alpine Boulevard: W. Victoria Drive to Marshall Road (LOS F)
- Alpine Boulevard: Marshall Road to E. Victoria Drive (LOS F)
- Alpine Boulevard: South Grade Road to Willows Road (West) (LOS F)

TABLE 3
INTERSECTION OPERATIONS

INTERSECTIONS	CONTROL TYPE	PEAK HOUR	EXISTING		EXISTING + PROJECT		EXISTING + PROJECT + CUMULATIVE PROJECTS	
			DELAY ^a	LOS ^b	DELAY	LOS	DELAY	LOS
W. Victoria Drive/Old Stagecoach Run/Main D/W	TWSC ^c	AM	8.9	A	10.8	B	11.9	B
		PM	8.9	A	9.8	B	10.1	B
W. Victoria Drive/Victoria Park Terrace	TWSC ^c	AM	10.7	B	13.0	B	13.2	B
		PM	10.3	B	10.8	B	11.5	B
W. Victoria Drive/Alpine Boulevard/Arnold Way	AWSC ^d	AM	16.4	C	18.7	C	29.7	D
		PM	28.1	D	29.3	D	178.9	F
Tavern Road/I-8 WB Ramps	TWSC ^e	AM	11.2	B	11.4	B	11.9	B
		PM	217.8	F	222.6	F	380.3	F
Tavern Road/I-8 EB Ramps	TWSC ^e	AM	9.1	A	9.2	A	9.4	A
		PM	83.7	F	85.1	F	99.9	F
E. Victoria Drive/Alpine Boulevard/South Grade Road	TWSC ^e	AM	19.3	C	21.0	C	24.1	C
		PM	17.5	C	18.0	C	82.9	F

Footnotes:

a. Average delay expressed in seconds per vehicle.

b. Level of Service.

c. TWSC – Two-Way Stop Controlled intersection. Minor street left turn delay is reported.

d. AWSC – All-Way Stop Controlled intersection.

e. Δ denotes project induced delay increase. The project adds 3 peak hour trips to the critical movement at the Tavern Road interchange. Therefore, the impact is cumulative.

Shading and Bold typeface represents a significant impact.

UNSIGNALIZED	
DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 < 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
> 50.1	F

TABLE 4
STREET SEGMENT OPERATIONS

Street Segment	Existing Capacity (LOS E) ^a	Existing		Existing + Project		Existing + Project + Cumulative Projects	
		ADT ^b	V/C ^c	ADT	V/C	ADT	V/C
TAVERN ROAD							
I-8 Eastbound Ramps to Alpine Boulevard	34,200	21,600	0.63	21,660	0.63	24,260	0.71
ALPINE BOULEVARD							
Tavern Road to W. Victoria Drive	16,200	8,750	0.54	8,810	0.54	11,710	0.72
W. Victoria Drive to Marshall Road	16,200	10,360	0.64	10,420	0.64	13,380	0.83
Marshall Road to E. Victoria Drive	16,200	7,990	0.49	8,050	0.50	10,450	0.65
South Grade Road to Willows Road (West)	16,200	4,590	0.28	4,605	0.28	8,005	0.49
VICTORIA PARK TERRACE							
Tavern Road to W. Victoria Drive	16,200	1,900	0.12	2,010	0.12	2,540	0.16
W. VICTORIA DRIVE							
East of Oldstagecoach Run	16,200	2,270	0.14	2,280	0.14	2,440	0.15
Old Stagecoach Run to Victoria Park Terrace	16,200	2,400	0.15	2,665	0.16	2,960	0.18
Victoria Park Terrace to Alpine Boulevard	16,200	1,850	0.11	2,010	0.12	2,180	0.13

Notes:

a. Capacity based on the County of San Diego Roadway Classifications, Level of Service and ADT Table.

b. ADT - Average Daily Traffic.

c. V/C - Volume to Capacity ratio.

d. LOS - Level of Service.

e. Δ denotes project induced V/C increase.

Shading and Bold typeface represents a significant impact.

PROJECT DRIVEWAY ASSESSMENT

Based on the very low traffic volumes on West Victoria Drive (2,400 ADT) and the fact that the project generates only a very small amount of weekday traffic, acceleration or deceleration lanes do not need to be provided. All driveways should be full access. Driveway turn prohibitions and the provision of acceleration/deceleration lanes are not necessary on roadways such as West Victoria Drive, which carry such a small amount of traffic.

A review of the proposed site plan was conducted in terms of on-site circulation. A dedicated pickup/drop-off area is provided in front of the church. All driveways are well throated in that drivers turning into the site are not immediately faced with choices to turn. Very good on-site circulation operations are expected. Three driveways are provided which is favorable at a church to accommodate peak ingress and egress periods. This number of driveways is not problematic on a roadway such as West Victoria Drive, which carries such a small amount of traffic.

A total of 228 parking spaces are proposed, 43 more than required by the County Zoning Ordinance. A striping plan for the proposed left-turn pocket at the main driveway is contained in **Appendix G**.

CONGESTION MANAGEMENT PROGRAM COMPLIANCE

The Congestion Management Program (CMP) was adopted on November 22, 1991, and is intended to directly link land use, transportation and air quality through Level of Service performance. Local agencies are required by statute to conform to the CMP.

The CMP requires an Enhanced CEQA Review for all large projects that are expected to generate more than 2,400 ADT or more than 200 weekday peak hour trips. Since the project is calculated to generate less than these amounts, this level of review is not required of the proposed project.

CORNER SIGHT DISTANCE ASSESSMENT

Access to the project site will be via one existing driveway and two proposed driveways intersecting West Victoria Drive. Currently West Victoria Drive is a two-lane undivided roadway between Victoria Park Terrace and Hale Drive. West Victoria Drive has a posted speed limit of 40 MPH with no shoulders provided. According to the County of San Diego Public Road Standards (July, 1999 – See **Appendix H**), 400 feet would be the minimum corner intersection sight distance required along West Victoria Drive based on the posted speed of 40 miles per hour.

Field observations along West Victoria Drive revealed no visual obstructions (such as boulders, trees, shrubs, etc.) that would limit sight distance at the project driveways with the exception of landscaping when looking to the south from the main driveway (D/W # 2). When looking to the north from both project driveways, sight distance was in excess of 600 feet. Based on this sight distance survey and the posted speed limit on West Victoria Drive, adequate corner sight distance is provided at both proposed driveways (D/W's - # 2 & # 3) when looking in both the northern and southern direction. Landscaping should be trimmed to ensure corner sight distance is not compromised.

Significance of Impacts / Mitigation Measures

Following is a description of the calculated significant impacts for the project based on the established Significance Criteria, along with recommendations for mitigation measures at the impacted locations. **Table 7** summarizes the cumulative project impacts and recommended mitigation measures.

Significant Impacts

The following key intersections and street segments were determined to be directly or cumulatively impacted by the project using established significance criteria and based on the results of *Tables 3* and *4*. The impacts to the unsignalized intersections are cumulative since the project adds less than 5 peak hour trips to the critical movement.

Direct Impacts:

None

Cumulative Impacts:

- a. W. Victoria Drive/Alpine Boulevard/Arnold Way intersection
- b. Tavern Road / I-8 Westbound Ramp intersection
- c. Tavern Road / I-8 Eastbound Ramp intersection
- d. E. Victoria Drive / Alpine Boulevard / South Grade Road intersection
- e. Alpine Boulevard: Tavern Road to W. Victoria Drive segment
- f. Alpine Boulevard: W. Victoria Drive to Marshall Road segment

Access Impacts:

- g. Significant access related impacts would occur if adequate access is not provided.
- h. Significant "Special Event" impact.

Mitigation Measures

- a. The project should contribute a fair share towards the proposed improvements at the West Victoria/Alpine Boulevard/Alpine Way intersection, which is a condition of T.P. 9047 project.
- b. The signalization of this intersection by Caltrans, which is fully funded and planned for installation in December 2006 would mitigate the impact to below a level of significance (See Caltrans email in *Appendix I*).
- c. The signalization of this intersection by Caltrans, which is fully funded and planned for installation in December 2006 would mitigate the impact to below a level of significance (See Caltrans email in *Appendix I*).
- d. The payment of TIF fees would mitigate the cumulative impact to this intersection along Alpine Boulevard (a TIF facility) since the project adds only 4 peak hour trips.
- e. The project should pay the appropriate County TIF.
- f. The project should pay the appropriate County TIF.
- g. The project should provide a clear space easement at the project driveways to ensure/maintain adequate sight distance in the future.
- h. The description of proposed project activities should be incorporated into the conditions of approval for the Major Use Permit (MUP). The project site should be limited such that no special events (more than 200 people) would start between 4:00 and 7:00 PM on any non-holiday weekday.